



KENTUCKY DEPARTMENT OF EDUCATION



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Business Continuity – Planning & Disaster Recovery

Kentucky Student Information System

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Goals and Objectives

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- Define KSIS Disaster Recovery (DR)
- Introduce DR process
- Assist districts prepare for a DR process
 - ▣ Incorporate into local business continuity plan

Definitions and Distinctions

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- “An occurrence that disrupts the functioning of an organization resulting in the loss of data, loss of personnel, loss of business or loss of time” — Hiatt 2000
- Internal and/or External Flooding
- Internal and/or External Fire
- Snow and Ice Storms
- Epidemics
- Lightning
- High Winds, etc.

Definitions and Distinctions

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KSIS DR is a situation where the Infinite Campus application becomes unavailable as the result of a site being

- Destroyed
- Offline for an extended period of time

But some district facilities still have power, network and internet connectivity

Note: KSIS DR process covers situations in which site is unharmed but Infinite Campus-provided equipment has failed

KSIS Systems Components

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System components that may need a recovery process:

- Database Server – Either a separate server or on same hardware as application server
- Application Server – Either a separate server or on same hardware as database server
- Balancer – Separate appliance device
- Ethernet Switch – Separate device (district provided)
- Uninterruptible Power Supply (UPS) – Separate device (district provided)

Note: Sites are expected to provide redundancy to power and network connectivity up to the Infinite Campus server(s)

Roles and Responsibilities

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- Office of Education Technology (OET) / Kentucky Education Technology Systems (KETS) Service Desk
- Commonwealth Office of Technology (COT)
- District end users
- District support desk
- Infinite Campus Support
- Infinite Campus Hosting

What Districts Should Do

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District Edition End User



District Support Desk



Campus Support Desk



Campus Hosting

Regardless of cause, when application is unavailable for all users in district:

- Enter a support case
- Immediately follow up via phone to Infinite Campus Support (1-888-461-2004) or to Hosting Emergency option (1-888-461-2004, option #8)

Infinite Campus has installed monitoring on all servers

- Provides notification to Infinite Campus Hosting if a server of any kind becomes unresponsive

Once Infinite Campus has notification of issue (either automated or via district support ticket) issue will be analyzed to determine immediate resolution

- Primary decision criteria is to minimize downtime for end users

What Districts Should Expect

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- Infinite Campus Hosting will attempt to resolve issue remotely
- IF server(s) is not accessible remotely
 - ▣ THEN Infinite Campus Hosting will contact KETS or district to further analyze issue
- IF server will not be available for 48 hours or more
 - ▣ THEN Infinite Campus Hosting will create a temporary backup site in the Infinite Campus Data Center in Minnesota
 - ▣ Districts, KDE and KETS will be contacted/informed
 - ▣ District's previous night backup will be restored by Infinite Campus
 - ▣ District will be given new URL (district contact needs to notify end users)
 - ▣ Infinite Campus Hosting will continue assessing root cause of issue and act accordingly

What Districts Should Expect

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- IF equipment needs to be replaced
 - ▣ THEN Infinite Campus will arrange for replacement equipment to be shipped and installed
 - ▣ Infinite Campus will call district to arrange timeline for moving off temp site back to local server operations
- Infinite Campus Hosting will communicate to district, KDE and KETS to confirm closure
- Infinite Campus Hosting will document root cause and resolution

Note: Creating a temporary site may take 2-4 hours to complete (larger databases such as JCPS may take longer)

KDE Data Center Failure & Priority

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- If KDE contracted data center fails or is destroyed, a full disaster recovery plan will be enacted
 - KDE data center will be recreated in Infinite Campus data center in Minnesota
- Access Priority:
 1. ICSE will be brought online first as it is the real time statewide student locator function required for each district to be brought online. To be available within 24 hours of being notified of KDE Data Center outage
 2. Central and Eastern hosted districts will be restored to backup from prior evening and located on Infinite Campus hosted solution in Minnesota
 3. Depending on timeline to bring KDE Data Center back online, Infinite Campus will be prepared to add necessary hardware to provide a site equivalent to primary site
 4. When KDE Data Center comes back online, a detailed plan will be devised to gradually move operations back to KDE Data Center as primary production facility. This plan will address possible need to replace hardware.

Be Alert, Be Prepared, Plan Ahead

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- Read the KDE DR Process document
- Plan ahead to avoid problems
- Be prepared in event a problem occurs
- Make sure you have a way to distribute a new Infinite Campus login URL
- Be prepared to adjust proxy settings to not cache the NEW IC URL

Be Alert, Be Prepared, Plan Ahead

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- Do you know what your risks are?
- Are you taking necessary steps to prepare for potential problems?
- Do you have a plan identifying how to respond when a problem occurs?
- Have you determined how to operate if Infinite Campus is offline?
 - ▣ Printed reports/lists to keep handy
 - ▣ Temporary attendance forms to have available
 - ▣ What else?



Questions

Thank You



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